

## Healthy Environments and Lives (HEAL)

### Australian research network in human health and environmental change

Vardoulakis, Sotiris; Matthews, Veronica; Ford, Linda Payi; Oyarce, Daniela Espinoza; Farrant, Brad; Johnston, Fay ; Cass, Alan; Bentley, Rebecca; Williams, Craig; Chu, Cordia

*Published in:*

The Lancet. Planetary health

*DOI:*

[10.1016/S2542-5196\(22\)00277-7](https://doi.org/10.1016/S2542-5196(22)00277-7)

Published: 01/10/2022

*Document Version*

Publisher's PDF, also known as Version of record

[Link to publication](#)

*Citation for published version (APA):*

Vardoulakis, S., Matthews, V., Ford, L. P., Oyarce, D. E., Farrant, B., Johnston, F., Cass, A., Bentley, R., Williams, C., & Chu, C. (2022). Healthy Environments and Lives (HEAL): Australian research network in human health and environmental change. *The Lancet. Planetary health*, 6, S15. [https://doi.org/10.1016/S2542-5196\(22\)00277-7](https://doi.org/10.1016/S2542-5196(22)00277-7)

#### General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal

#### Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

# Healthy Environments and Lives (HEAL): Australian research network in human health and environmental change

Sotiris Vardoulakis, Veronica Matthews, Linda Payi Ford, Daniela Espinoza Oyarce, Brad Farrant, Fay Johnston, Alan Cass, Rebecca Bentley, Craig Williams, Cordia Chu



## Abstract

**Background** The HEAL Network aims to strengthen the Australian health system and community resilience to climate change, extreme events, and environmental degradation. This resilience is achieved by stimulating collaborative research that will improve our understanding of the interactions between climate, the natural and built environment, public health, and the benefits and trade-offs of adaptation and mitigation action aiming to reduce the health impacts of environmental change. HEAL is embedding systematic codesign processes with First Nations people on environmental change preparedness, capacity and capability building, and mitigation and adaptation solutions.

**Methods** HEAL is addressing capacity and capability gaps in human health, climate and environmental change, and credibility gaps in interactions between policy makers, practitioners, industry, and communities. The HEAL Network is regionally distributed and includes multiple communities of practice, comprising researchers, environmental and health practitioners, community organisations, and policy makers. On the basis of initial gap analyses and stakeholder consultations, we have established ten interdisciplinary research themes (Indigenous knowledge systems; data and decision support systems; science communication; health system resilience; bushfires and extreme events; food, soil, and water security; biosecurity and emerging infectious diseases; urban health; rural and remote health; and at-risk populations and life course solutions) and a range of research capacity and capability strengthening activities that will support investigators, local services and communities.

**Findings** The HEAL Network is developing the skills needed to formulate priorities, codesign projects, and translate and implement research findings into policy and practice. New interdisciplinary collaborations emerging from HEAL have led to development of participatory action research, such as facilitating Aboriginal community-led climate adaptation plans based on traditional knowledge and environmental, climate, and health data.

**Interpretation** HEAL identifies evidence gaps and prioritises research capacity and capability needs and local action with community-led codesign of environmental change adaptation and mitigation solutions. This network and related programme of work will lead to more effective national, regional, and local policies to protect and improve planetary health and reduce inequities within and across communities and generations.

**Funding** The HEAL National Research Network has been awarded funding from the Australian Government National Health and Medical Research Council Special Initiative in Human Health and Environmental Change.

**Copyright** © 2022 The Author(s). Published by Elsevier Ltd. This is an Open Access article under the CC BY 4.0 license.

### Contributors

SV is the Director of the HEAL National Research Network, which has been codesigned by all authors. SV and DEO accessed and verified the data.

### Declaration of interests

We declare no competing interests.

Published Online  
October 31, 2022

National Centre for  
Epidemiology and Population  
Health, Australian National  
University, Canberra,  
ACT, Australia

(Prof S Vardoulakis PhD,  
D Espinoza Oyarce MSc);  
University Centre for Rural  
Health, University of Sydney,  
Sydney, NSW, Australia  
(V Matthews PhD); College of  
Indigenous Futures, Education  
and Arts (L P Ford PhD) and  
Menzies School of Health  
Research (Prof A Cass PhD),  
Charles Darwin University,  
Darwin, NT, Australia;  
Aboriginal Health and  
Wellbeing, Telethon Kids  
Institute, Nedlands, WA,  
Australia (B Farrant PhD);  
Menzies Institute for Medical  
Research, University, University  
of Tasmania, Hobart, TAS,  
Australia (Prof F Johnston PhD);  
Melbourne School of  
Population and Global Health,  
University of Melbourne,  
Melbourne, VIC, Australia  
(Prof R Bentley PhD); UniSA  
Clinical and Health Sciences,  
University of South Australia,  
Adelaide, SA, Australia  
(Prof C Williams PhD); Centre for  
Environment and Population  
Health, Griffith University,  
Brisbane, QLD, Australia  
(Prof C Chu PhD)

Correspondence to:  
Prof Sotiris Vardoulakis, National  
Centre for Epidemiology and  
Population Health, Australian  
National University, Canberra,  
ACT 2061, Australia  
sotiris.vardoulakis@anu.edu.  
au